

10/804,623 Piret

03-19-2004

CAN 12-19-2002
CAN 12-21-2001Application No.: 10/804,623
Attorney Docket No.: 25406AIN THE CLAIMS

1. (Currently Amended) A two-part sizing composition for sizing a reinforcing fiber material comprising:

a size composition; and

a binder composition including a copolymer formed from maleic anhydride and butadiene or a derivative thereof of said copolymer, said derivative being selected from the group consisting of an anhydride derivative, an acid derivative, a half-ester derivative and a half-amide derivative copolymer being formed from maleic anhydride and at least one other monomer copolymerizable therewith selected from the group consisting of butadiene and ethylene ethylacrylate.

unsaturated organic acid

which
from
in spec.
synth??

2. Canceled.

3. (Currently Amended) The two-part sizing composition according to claim 1, wherein said binder composition further includes at least one other copolymer formed from maleic anhydride and at least one other monomer copolymerizable copolymerized therewith selected from the group consisting of ethylene, propylene, (iso)butylene, methyl vinyl ether and derivatives thereof.

4. (Original) The two-part sizing composition according to claim 1, wherein said size composition comprises one or more coupling agents.

"Contee"
"Maldone 280"
- acid content??

Lotader 4700
GEMA/MA

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5. (Original) The two-part sizing composition according to claim 4, wherein said size composition further comprises at least one member selected from the group consisting of a lubricant and a wetting agent.
6. (Original) The two-part sizing composition according to claim 5, wherein said binder composition further includes one or more members selected from the group consisting of a film forming agent, a crosslinking agent and at least one surfactant.
7. (Original) The two-part sizing composition according to claim 4, wherein said size composition further comprises one or more additives selected from the group consisting of pH adjusters, antioxidants, antifoaming agents, antistatic agents and non-ionic surfactants.
8. (Original) The two-part sizing composition according to claim 1, wherein said binder composition further includes at least one member selected from the group consisting of a film forming agent, a crosslinking agent and at least one surfactant.
9. (Original) The two-part sizing composition according to claim 8, wherein said binder composition further includes at least one member selected from the group consisting of lubricants and antistatic agents.
10. (Original) The two-part sizing composition according to claim 1, wherein said reinforcing fiber material is selected from the group consisting of A-type glass, C-type glass, E-type glass, S-type glass and derivatives thereof.

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11. (Currently Amended) A reinforcing fiber product comprising one or more strands of a reinforcing fiber material coated first with a size composition and then with a binder composition that includes a copolymer formed from maleic anhydride and butadiene or a derivative thereof of said copolymer, said derivative being selected from the group consisting of an anhydride derivative, an acid derivative, a half-ester derivative and a half-amide derivative said copolymer being formed from maleic anhydride and at least one other monomer copolymerizable copolymerized therewith selected from the group consisting of butadiene and ethylene ethylacrylate.

12. (Original) The reinforcing fiber product of claim 11, wherein said size composition comprises one or more coupling agents.

13. (Original) The reinforcing fiber product of claim 12, wherein said size composition further comprises at least one member selected from the group consisting of at least one lubricant and at least one wetting agent.

14. (Original) The reinforcing fiber product of claim 11, wherein said binder composition further includes at least one member selected from the group consisting of a film forming agent, a crosslinking agent and at least one surfactant.

15. (Original) The reinforcing fiber product of claim 11, wherein said reinforcing fiber material is selected from the group consisting of A-type glass, C-type glass, E-type glass, S-type glass and derivatives thereof.

16. (Original) The reinforcing fiber product of claim 11, wherein said reinforcing fiber product is in the form of a densified pellet.

17. – 20. Canceled

21. (New) The two part sizing composition according to claim 1, wherein said copolymer includes ethylene-ethylacrylate.

22. (New) A two-part sizing composition for sizing a reinforcing fiber material comprising:

a size composition; and

a binder composition including a copolymer formed from maleic anhydride and ethylene-ethylacrylate or a derivative of said copolymer.

23. (New) The two-part sizing composition according to claim 22, wherein said binder composition further includes at least one other copolymer formed from maleic anhydride and at least one other monomer copolymerized therewith selected from the group consisting of ethylene, propylene, (iso)butylene, methyl vinyl ether and derivatives thereof.

24. (New) A reinforcing fiber product comprising one or more strands of a reinforcing fiber material coated first with a size composition and then with a binder composition that includes a copolymer formed from maleic anhydride and ethylene-ethylacrylate or a derivative of said copolymer.

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25. (New) The reinforcing fiber product according to claim 24, wherein said binder composition further includes at least one other copolymer formed from maleic anhydride and at least one other monomer copolymerized therewith selected from the group consisting of ethylene, propylene, (iso)butylene, methyl vinyl ether and derivatives thereof.